

NEBRASKA



AVIATION SYSTEM PLAN

THE PLAN

The Nebraska Department of Aeronautics initiated an update of the Nebraska State Airport System Plan (SASP), which was last completed in 1992. The role of the air transportation industry in Nebraska and throughout the world is continually evolving. As this evolution of the ‘use of aviation’ occurs, it is necessary to regularly reexamine the aviation system to assure the sufficiency of the system of public-use airports in Nebraska.

THE PROCESS



The NASP is comprised of a series of steps, the first of which is to identify a set of system measurement criteria that characterize an adequate airport system for Nebraska and then establish a vision for development of the system.



The update of the NASP was pursued with three primary purposes:

- To identify and analyze the aviation assets and needs of the State to assure that aviation properly performs its role to support Nebraska's economy and its citizens;
- To provide continued guidance for development of a system of airports that meets the State's existing and future air transportation needs; and
- To build consensus among public policy makers and airport sponsors so that the plan's recommendations can be accomplished in a timely manner.

INPUT

A Planning Advisory Committee (PAC) was assembled by the Department to provide input and guidance for the study. The PAC was comprised of volunteer members with a broad base of knowledge including representatives of the FAA, airports, airlines, and state agencies

including Economic Development, Health & Human Services, and Roads. PAC members reviewed documentation, attended meetings, and provided comments as the study's analysis progressed. In addition to the PAC, public input and involvement was encouraged during the

process. Six public informational meetings related to the NASP were held around the State and a presentation was made during the 2000 Nebraska Aviation Symposium.



EXISTING SYSTEM

The existing Nebraska Aviation System includes 90 public-use airports. Of these 90 airports, 86 are publicly owned and four are privately owned. Nebraska also has a seaplane base that was not included in the analysis of the 90 airports. These airports and other private-use airports serve the State's 4,100 pilots and 2,600 registered aircraft, as well as pilots and aircraft from other states that travel through or to Nebraska.

In the 1920s, Nebraska began with 11 airports. Over the years, many public-use airports have opened and closed and continued to be improved. The most notable improvements have been paving and lighting.

	1920	1930	1940	1950	1960	1970	1980	1990	2000
AIRPORTS OPENED DURING THE DECADE	11	25	65	44	24	15	2	3	0
AIRPORTS CLOSED DURING THE DECADE	0	3	11	27	12	17	17	11	1
TOTAL PUBLIC-USE AIRPORTS	11	33	87	104	116	114	99	91	90
NUMBER PAVED	0	3	20	31	48	71	74	79	78
NUMBER LIGHTED	0	11	21	54	71	81	81	81	80

Facilities at the 90 system airports are wide-ranging with long paved runways at airports such as Omaha-Eppley Airfield to grass strips located throughout the State. Of the 90 system airports, 78 have at least one paved runway and the remaining 12 have only turf runways.

Ten Nebraska airports are served by scheduled airlines and 17 airports receive daily cargo by air. All 90 airports serve the vast needs of general aviation.

AVIATION ACTIVITY INDICATORS

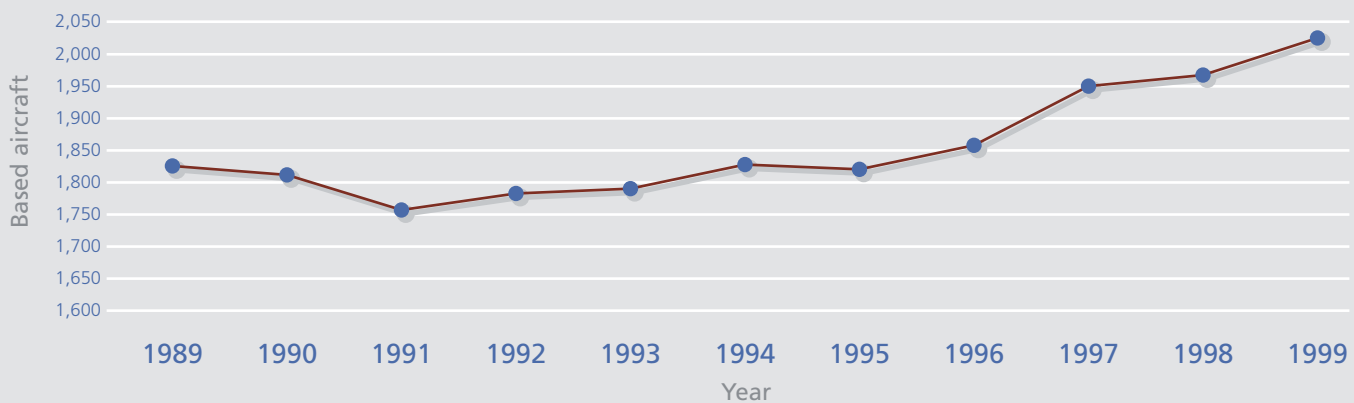
Projections of aviation activity are an important indicator of trends affecting the demand for airport facilities in the State. Three indicators are generally monitored to assess airport use. These include based aircraft, operations, and enplanements. Based aircraft is a good indicator of airport use, but the other two measures have very limited relevance due to inaccurate or incomplete information.

Airport operations are accurately recorded at airports with control towers

(Omaha, Lincoln and Grand Island), but are vague estimates at all other airports.

Enplanement data is reported by airlines and charter companies and provides good information related to passenger use, mostly at the 10 airports with scheduled airline service. The number, however, only provides help for individual airports in regards to terminal facilities and has little bearing regarding airside facilities.

National trends reported by the FAA project that active general aviation aircraft will increase at an average annual rate of 0.9 percent between 1999 and 2011. This is the same rate at which Nebraska's total based aircraft have grown in the most recent 10-year period.



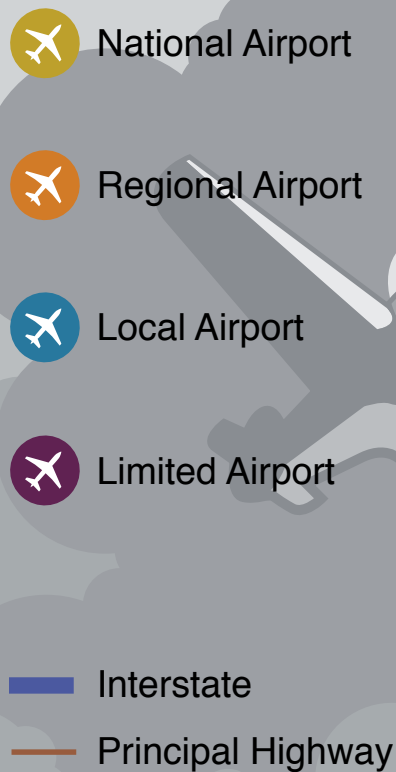
AVIATION DEMAND FACTORS



Due to the difficulties in using aviation activity indicators, the PAC chose to focus on the demand for aviation services by the end user. Demand for aviation services is influenced by factors that are related to aviation, as well as factors that are unrelated. It was determined that both aviation and non-aviation factors should be considered to achieve a balance in evaluating airport needs throughout the State. The demand factors that were identified through meetings with the Department staff and PAC, review of other similar studies, review of the 1992 NASP, and research of available data sources included the following:

- Number of based aircraft
- Population
- Medical facilities
- Agricultural use of aviation
- Local economic activity
- Business use of aviation
- Distance to metropolitan areas (over 100,000)

RECOMMENDED SYSTEM



Source: National Transportation Atlas Database, Nebraska Department of Roads, and US Census Bureau



NATIONAL AIRPORTS -- *Maintain a consistent and contributing role in enabling the local, regional, and statewide economy to have access to and from the national and worldwide economy.*

RUNWAY LENGTH:	75% Large Aircraft at 60% Useful Load (5,500' and up)
RUNWAY WIDTH:	To Meet ARC (100' – 150' typical)
CROSSWIND RUNWAY:	As Needed to Meet 95% Coverage
TAXIWAY:	Full Parallel
NAVIGATIONAL AID:	Precision Approach
WEATHER:	Automated Weather Reporting
SERVICES:	Phone, Restrooms, FBO, Maintenance, Jet Fuel, Ground Transportation, RCO/ATCT
FACILITIES:	Terminal, Aircraft Apron, Hangars, Auto Parking
GROUND ACCESS:	Full paved road from associated city to terminal Roadway signs on and off site

REGIONAL AIRPORTS -- *Maintain a contributing role in supporting the local and regional economy and connecting it to the state and national economy.*

RUNWAY LENGTH:	100% of Small Aircraft w/ less than 10 passenger seats (4,000' – 6,200')
RUNWAY WIDTH:	To Meet ARC (75' typical)
TAXIWAY:	Partial Parallel
NAVIGATIONAL AID:	Non-Precision Approach
WEATHER:	Automated Weather
SERVICES:	Phone, Restrooms, FBO, Maintenance, Jet Fuel, Ground Transportation
FACILITIES:	Terminal, Aircraft Apron, Hangars, Auto Parking
GROUND ACCESS:	Full paved road from associated city to terminal Roadway signs on and off site





SYSTEM PERFORMANCE BENCHMARKS

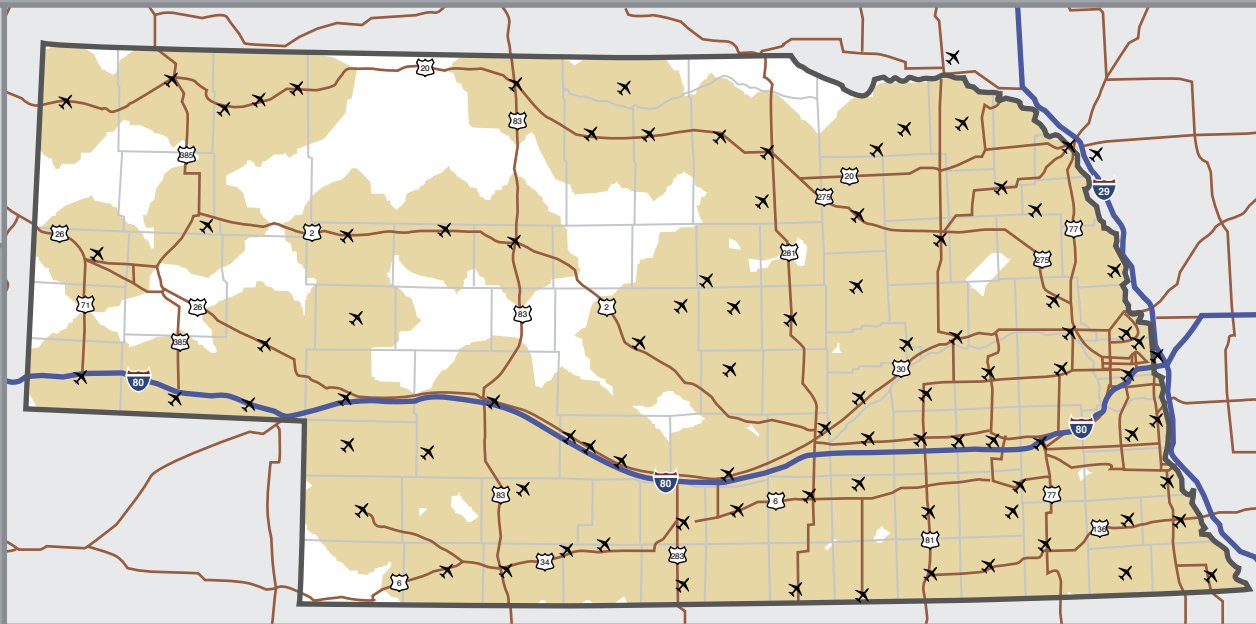
The NASP will be continually evaluated based on goals and objectives outlined through the planning process. In summary, airports must be sufficiently **accessible** from the air and ground, located to serve

economic needs, and have the necessary **physical** infrastructure to function. Each benchmark was analyzed to determine how the Nebraska Aviation System is performing.

Overall Airport System Coverage

30 Minute Drive Time Coverage Area: 41,593,750 Acres (84% of State Total)
Population Served: 1,653,173 Persons (98.9% of State Total)

-  Airport
-  Interstate
-  Principal Highway
-  30 Minute Drive Time to Aviation Service



Source: National Transportation Atlas Database and Nebraska Department of Roads

Airports Providing Access to the State

Approximately 99 percent of Nebraska's population is within a 30-minute drive from a public-use airport. The 90 system airports cover 84 percent of the State's land area based on 30-minute drive times. Nebraska's airport system provides excellent access.

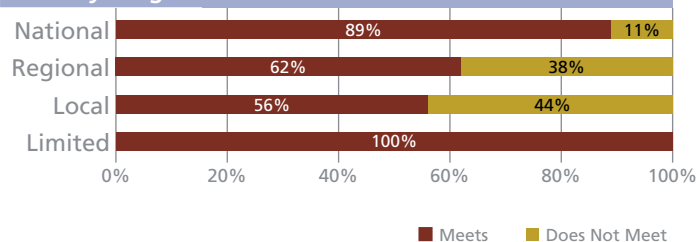
Airports Serving Economic Demand

Using net taxable retail sales for Nebraska communities, 60 economic/trade centers were identified. These economic/trade centers had more than \$12,000,000 in 1999 sales. Airports in the National and Regional categories were recommended to serve these centers.

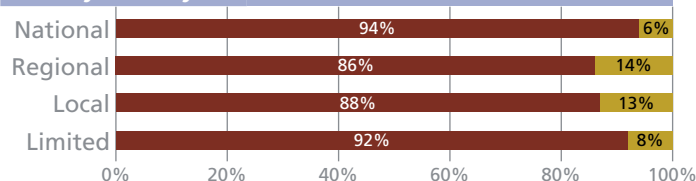
Airports Meeting Physical Standards

Physical performance of Nebraska's airports was determined by comparing existing airport facilities and services to standards developed for the four airport classifications. Facilities such as runway length and width, taxiway, navigational aids, lighting, and weather were evaluated. Services such as fixed-base operator/maintenance and fuel were also evaluated.

Runway Length



Primary Runway PCI



Runway length standards for the recommended airports revealed a need for 22 runway extensions. The runway pavement conditions indicate the Department's success in maintaining the runway infrastructure through its pavement program.

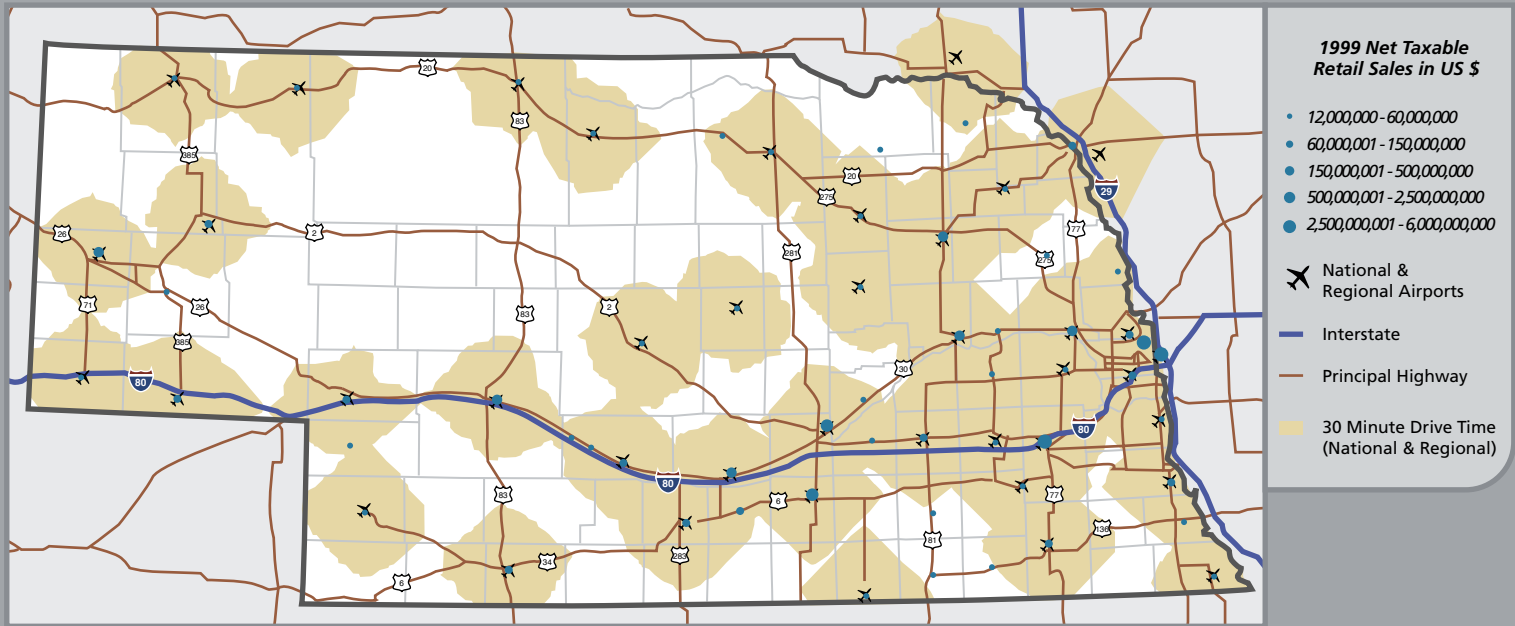
The system was also evaluated in terms of its ability to serve the State overall, with airports of various categories located throughout Nebraska. The analysis revealed that some airports should have

additional facilities/services to meet their recommended role, while other airports were providing duplicative services and that additional facility needs were minimal.

Nebraska Net Taxable Retail Sales & Recommended Airport Services

National & Regional - 30 Minute Drive Time Coverage Area: 29,315,455 Acres (59.5% of State Total)

Population Served: 1,559,198 Persons (93.3% of State Total)



Source: National Transportation Atlas Database, Nebraska Department of Roads, and the Dept. of Economic Development

CAPITAL NEEDS

Through evaluation of the airport system and the options available to improve the system, projects were identified at many Nebraska airports. These projects and their associated costs were noted by airport and by role.

Total capital needs for Nebraska's Aviation System over the planning period are as follows:



ALL PROJECTS

	Federal	State	Local/Private	TOTAL
National	\$221,663,262	\$5,996,809	\$179,237,048	\$406,897,119
Regional	\$41,957,374	\$4,432,740	\$28,435,349	\$74,825,463
Local	\$15,583,640	\$6,442,910	\$15,285,090	\$37,311,640
Limited	\$3,781,450	\$2,997,151	\$12,354,409	\$19,133,010
STATEWIDE	\$282,985,726	\$19,869,610	\$235,311,896	\$538,167,232

The preparation of this document was financed in part through an Airport Improvement Program grant from the Federal Aviation Administration as provided under Section 47104 of Title 49 of the United States Code. The contents do not necessarily reflect the official views or policy of the FAA. Acceptance of this study by the FAA does

not in any way constitute a commitment on the part of the United States to participate in any development depicted therein nor does it indicate that the proposed development is environmentally acceptable in accordance with appropriate public laws.



For more information contact:

Nebraska Department of Aeronautics
P.O. Box 82088
Lincoln, NE 68501
402.471.2371
www.aero.state.ne.us

Prepared by:
Wilbur Smith Associates
www.wilbursmith.com

HWS Consulting Group
www.hws-con.com

